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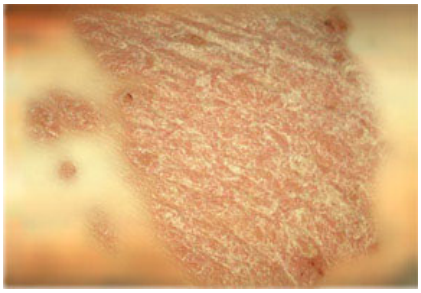
Psoriasis
Reference Summary

Psoriasis is a long-lasting skin disease that causes the skin to become inflamed. Patches of thick, red skin are covered with silvery scales. It affects 1-2% of the United States population, or about 5.5 million people. People with psoriasis may have discomfort including pain and itching, restricted motion in their joints, and emotional distress. This reference summary explains psoriasis. It covers the symptoms, causes, diagnosis, and treatment options.



Psoriasis

Psoriasis is a *chronic* skin disease, which means it is long lasting. Patches of skin become inflamed and *scales* develop. Scaling occurs when cells in the outer layer of skin reproduce faster than normal and pile up on the skin's surface. Although the disease occurs in all age groups and equally among men and women, it mainly affects adults.

People with psoriasis may suffer discomfort, including pain and itching, restricted motion in their joints, and emotional distress. Psoriasis usually causes patches of thick, red skin covered with silvery scales. These patches, which are sometimes referred to as *plaques*, usually itch and may burn. The skin at the joints may crack. Psoriasis most often occurs on the elbows, knees, scalp, lower back, face, palms, and soles of the feet, but it can affect any skin location.

Psoriasis may also affect the fingernails, toenails, and soft tissues inside the mouth and genitalia. About 15% of people with psoriasis have joint inflammation that causes symptoms of arthritis. This condition is called *psoriatic arthritis*.

Causes

Recent research indicates that psoriasis is probably a disorder of the immune system. The immune system includes special blood cells that identify and destroy foreign material, including viruses and bacteria. These blood cells are called white blood cells. There are two types of white blood cells: T-cells and B-cells. When T-cells identify a foreign material or organism, they attack it. When B-cells identify a foreign material, they secrete special chemicals called antibodies. These antibodies stick on the foreign material and destroy it. Psoriasis causes abnormal immune system activity of T-cells in the skin. These T-cells cause the skin to become inflamed and reproduce excessively.

About 1/3 of all psoriasis cases are inherited. Researchers are studying large

families affected by psoriasis to identify the genetic factors that cause the disease. People with psoriasis may notice that symptoms get worse and then better. Conditions that may cause it to get worse include climate changes, infection, stress, and dry skin. Medicines called beta-blockers, used to treat high blood pressure, and lithium, used to treat depression, can trigger outbreaks of psoriasis.

Diagnosis & Types
Doctors usually diagnose psoriasis after a carefully examining the skin. However, diagnosis may be difficult since psoriasis sometimes looks like other skin diseases. The doctor may need to take a biopsy, a sample of skin. The skin sample is examined by a pathologist, who views it under a microscope. There are several forms of psoriasis. The most common form is *plaque psoriasis*.

In ***plaque psoriasis***, lesions are red at the base and covered by silvery scales.

Guttate psoriasis. Small lesions appear on the abdomen, chest, back, limbs, and scalp. Guttate psoriasis is usually triggered by bacterial infections, such as *Streptococcus*.

Pustular psoriasis. Blisters of noninfectious pus appear on the skin. Attacks of pustular psoriasis may be triggered by medication, infection, emotional stress, or exposure to certain chemicals. Pustular psoriasis can affect either small or large areas of the body.

Inverse psoriasis. Large, dry, smooth, vividly red plaques occur in the folds of the skin near the genitals, under the breasts, or in the armpits. Inverse psoriasis is related to increased sensitivity to friction and sweating and may be painful or itchy.

Erythrodermic psoriasis. Extensive red and scaled skin is often itchy or painful. Severe sunburn or certain medications may cause Erythrodermic psoriasis.

Treatment Options
Treatment for psoriasis depends on:

- how severe it is
- how much of the body is affected
- the type of psoriasis
- how well the skin responds to initial treatment

The following treatments may be tried, usually in this order:

- topical treatment, applied directly to the skin
- phototherapy, treatment with light
- systemic treatment, taking oral medication

Over time, affected skin can become resistant to treatment, especially topical corticosteroids. In addition, a treatment that works well in one person may not work at all for someone else. A trial-and-error approach usually helps the doctor to find a treatment that works. Treatments may need to be switched from time to time.

Topical Treatment
Treatment applied directly to the skin is sometimes effective in clearing up psoriasis.

Some patients respond well to sunlight. Short, daily doses of sunlight that do not cause a sunburn clear up psoriasis in many people.

Corticosteroid ointments can improve, but not completely clear psoriasis. Using powerful steroids too much or for too long can cause psoriasis to get worse. Topical medicines made from vitamin D_3 can control the excessive

production of skin cells and can improve symptoms.

Topical medicines containing retinoids, which is derived from Vitamin A, can help control psoriasis. They are not as fast-acting as corticosteroid ointments, but have fewer side effects. Women of childbearing age should use birth control when using retinoids. Other topical medicines include coal tar, Anthralin, and salicylic acid. Ask your doctor about the benefits and side effects of any medication you intend to take.

Other topical treatments, such as bath solutions and moisturizing lotion, may be soothing but are not usually strong enough to clear up lesions long-term.

Phototherapy
Ultraviolet (UV) light from the sun causes T cells in the skin to die. This reduces inflammation and slows the overproduction of skin cells that causes scaling. A more controlled form of artificial light treatment may be used for mild psoriasis. There are more than one type of UV light, A and B. UV-B phototherapy uses artificial light sources. Psoralen and UV-A may be combined for a treatment called PUVA therapy. Psoralen is a medication that can be taken orally or topically. It makes the body more sensitive to UV light. However, long-term treatment is associated with an increased risk of skin cancers.

Oral Medications
For severe forms of psoriasis, medicine taken internally may be best. Some of these medications suppress the immune system. These medications include:

- Methotrexate
- Cyclosporine
- Hydroxyurea

Medications that suppress the immune system can have significant side effects. Among these is the possibility of abnormalities in babies born to patients taking this type of medication. Retinoids are a medication that is similar to vitamin A. Since it also may cause birth defects, women must use some form of birth control beginning 1 month before treatment until 3 years after treatment.

Antibiotics may help when an infection, such as *Streptococcus*, triggers an outbreak of psoriasis, as in certain cases of guttate psoriasis.

Summary
Psoriasis is a common skin disease. Even though it can flare up sometimes, treatment options are available to control it. Several treatments may need to be tried before finding one that is effective. Thanks to medical advances, more and more treatment options are becoming available for patients with psoriasis, allowing them to live normal healthy lives!